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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,626	01/17/2002	Naoki Matsushima	16869N-040600US	3103
20350	7590	12/06/2004	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			LEE, HWA S	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,626

Applicant(s)

MATSUSHIMA ET AL.

Examiner

Andrew Hwa S. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/7/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

This Office Action is in response to Applicant's amendment of 10/4/04. By the amendment, claims 1-3 and 6-17 are pending. Claims 1 and 2 have been amended and claims 4 and 5 have been cancelled.

The indicated allowability of claims 4 and 5 is withdrawn in view of the newly discovered reference(s) to Masatoshi et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 10-13, are rejected under 35 U.S.C. 102(b) as being anticipated by Masatoshi et al (submitted in IDS of 9/7/04).

Masatoshi et al (Masatoshi hereinafter) show an efficient laser diode to single-mode fiber coupling comprising:

a light emitting element (section II);

an optical fiber;

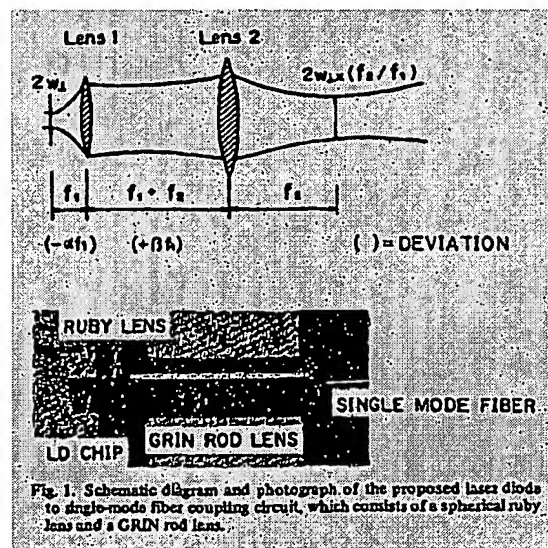
a first lens (Lens 1) for collimating light from the light emitting element; and

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a second lens (Lens 2) for focusing said collimated light to said optical fiber;

wherein when a focal length of said first lens is designated by a notation f_1 and a focal length of said second lens is designated by a notation f_2 , said first lens and said second lens are arranged such that an optical distance d between a principal plane of a side of said first lens proximate to said second lens and a principal plane of a side of said second lens proximate to said first lens satisfies $|d-(f_1+f_2)| \leq 5 \times f_1$, and

wherein said first lens and said second lens are arranged such that a relationship between said focal length f_1 of said first lens and said focal length f_2 of said second lens becomes $f_2/f_1 > \text{or} = 5$.



For **claim 1**: $|d-(f_1+f_2)| \leq 5 \times f_1$,

For **claim 2**: $d = f_1 + f_2$,

For **claim 3**: $|d-(f_1+f_2)| \leq 5 \times f_1$.

For **claims 4 and 5**, $f_1=174\text{-}580$ micrometers and $f_2=1.8$ mm and Figure 4..

For **claims 10 and 11**, for instance, please see column 2, page 1026.

For **claims 12 and 13**, please see figure 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masatoshi as applied to claims 1-5 above further in view of Tabuchi et al (US 5,757,999).

Masatoshi only shows a schematic drawing of the system and does not expressly show the details of the structure such as the passive alignment and the groove on the silicon board.

Tabuchi shows a hybrid integrated circuit having passive alignment grooves in a silicon board. At the time of the invention, one of ordinary skill in the art would have used the grooves for aligning and holding the optical elements in order to hold and keep the elements in alignment.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masatoshi, and further in view of Goto et al (IDS of 9/704).

Masatoshi does not show the transmission capacity of an optical fiber network that the optical module is connected to.

Goto et al show an optical fiber network having a transmission capacity of 10 Gbits/s.

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At the time of the invention, one of ordinary skill in the art would have connected the optical module to the optical fiber network of Goto et al in order to have system having a high transmission capacity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Hwa S. Lee
Examiner
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